

REMARKS/ARGUMENTS

Claims 19-28 are pending in this application. By this Amendment, Applicant CANCELS claims 1 and 3-9 and ADDS claims 19-28.

Claims 1 and 3-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Azima et al. (U.S. 6,252,676) in view of Tsunekawa (U.S. 6,734,989). Applicant has canceled claims 1 and 3-9 and added new claims 19-28.

Claim 19 recites:

A method for rendering input data simultaneously into output data including a first output format and a second output format, the method comprising the steps of:

dividing the output data into a plurality of bands; and
sequentially processing each of the plurality of bands, wherein the processing of each of the plurality of bands includes:

i) **generating first output data having the first output format;**

and

ii) **generating, from the first output data, second output data having the second output format, wherein the first output format is different from the second output format; wherein the first output format is a bitmap arranged to drive a main output device, and the second output format is arranged to drive a proofing device; and**

each of the plurality of bands is processed into the first output format and the second output format before a next of the plurality of bands is processed into the first output format and the second output format. (emphasis added)

Applicant's claim 27 recites features that are similar to the features and method steps recited in Applicant's claim 19, including the above-emphasized features.

The Examiner alleged that the combination of Azima et al. and Tsunekawa teaches all of the features and method steps recited in Applicant's previously pending claims 1 and 3-9. In particular, the Examiner appears to have alleged, in the second full paragraph on page 4 of the outstanding Office Action, that Azima et al. teaches rendering input data simultaneously into output data in a first output format (e.g., TIFF format) and in a second output format (TIFF format wrapped in page description language). The Examiner also alleged that Azima et al. teaches defining for each color,

a plurality of bands (e.g., page separations). See, for example, the third full paragraph on page 4 of the outstanding Office Action.

Applicant respectfully disagrees.

First, Azima et al. teaches outputting data in a first output format to a main output device 46, and outputting data in a second output format to a proofer 68. The data in the first output format is raster data created by the RIP 34 for the main output device 46 (see, for example, column 7, lines 6-12 of Azima et al.). The data in the second output format of Azima et al. may take several forms including, for example, TIFF, TIFF wrapped in page description language, raster files that have been descreened, contone images, raster files wrapped in page description language, etc. (see, for example, column 3, lines 48-65 and column 7, lines 16-28 of Azima et al.). The Examiner incorrectly characterized the TIFF format as a first output format because the various formats, including the TIFF format, disclosed in column 3, lines 48-65 of Azima et al. are designated for the proofer 68, and therefore correspond to the second output format.

Regardless of the data type in the second output format, the data in the first output format and the data in the second output format of Azima et al. are always created one after the other (the Examiner should note that Azima et al. is assigned to the same assignee as the present application). In particular, the Examiner is referred to column 6, lines 47-58 of Azima et al. which teach that the data in the second output format must be generated from the raster data (the first output format) after the raster data has been generated by the RIP 34 of Azima et al.

Preproof 43 converts RIP processed raster data into data that can be displayed by proofer 68. In one embodiment, preproof 43 is software that runs on a general purpose computer, such as a server class computer running such operating systems as Windows NT™, MacOS™, or a version of UNIX. In another embodiment, preproof 43 software is included on the same system as a front end 40, a RIP 34, or a print drive 41. If the preproof 43 is software residing on a front end 40, a RIP 34, or a print drive 41, the system must be of sufficient capacity to handle the added functionality. In another embodiment, preproof 43 is a dedicated hardware platform. (emphasis added)

The above passage of Azima et al. also teaches that a designated preproof 43 (whether additional software or hardware) must be provided to generate the data in the second output format from the data in the first output format. That is, Azima et al. does not teach integrated software or hardware that can simultaneously output data in a first output format and a second output format.

In column 8, lines 8-23, Azima et al. further teaches how the preproof 43 generates the data in the second output format from the data in the first output format.

In one embodiment, the proof 68 is driven by the output of RIP 34 **after** the rasters are converted by the preproof 43. **In this case the image is RIP processed into raster data for output to the output device 46, a process that produces one or more rasters each having characteristics of the final output device.** For example, in one embodiment the rasters have the size, resolution, and screen ruling associated with the output device 46. The rasters are each separations of the same image, with each separation associated with one color of the image. These rasters are binary rasters. It will most likely not be possible to image these rasters directly on the proof 68. **To image the rasters created for the output device 46 on the proof 68, the rasters need to have their size and resolution adjusted to image at a different resolution. The rasters need to be descreened to convert the rasters from the binary to contone.**

Alternatively, column 7, lines 29-41 of Azima et al. teach how the RIP 34 may generate the data in the second output format (data for the proof 68) before the data in the first output format.

In what is sometimes referred to as contract proof workflow, proof 68 is used to preview the image as it is processed by RIP 34. An image is sent, in page description language format, from the front end 40 or the image server 42 to the RIP 34. **The image is prepared by the RIP 34 to meet the input requirements of the proof 68 with regard to image size and resolution, and also to maximize the output capabilities of the proof 68. The final output device 46 may not even be determined at the time the image is sent to the proof 68,** and so the characteristics of the final output device 46 are not reflected in the contract proof. Rather,

the output characteristics of the proofer 68 are used to create the RIP output. (emphasis added)

Column 7, lines 42-47 of Azima et al. below clearly demonstrate that the data in the first and second output formats are generated at separate times, that is, after all of the data in one output format is created, the data in the other output format is generated.

The contract proof workflow allows the image to be processed by the same RIP 34 as will **later** process the image for the final output device 46. The use of the same RIP 34 as will be used **later** to produce rasters for the final output device 46 eliminates some artifacts that result from the use of different RIPs to create the proof and the final image. (emphasis added)

Accordingly, Azima et al. does not even remotely teach or suggest that the input data is simultaneously output in a first output format and a second output format.

Second, Applicant respectfully disagrees with the Examiner's allegation that the data in the page separations of Azima et al. correspond to the data in a plurality of bands as recited in Applicant's claims. Nevertheless, the Examiner alleged that Tsunekawa teaches the conventionality of sequentially processing each one of a plurality of bands. However, Tsunekawa does not cure the deficiencies of Tsunekawa for the following reasons.

The data contained in each of the plurality of bands of Tsunekawa consist of a single output format. Tsunekawa does not even remotely teach or suggest that the output data includes a first output format and a second output format, wherein the first output format is different from the second output format.

Even assuming *arguendo* that one of ordinary skill in the art would combine the teachings of Azima et al. and Tsunekawa, the resulting combination would still not teach or suggest the features and method steps of Applicant's claims 19 and 27 because Azima et al. unequivocally teaches that the data in the first and second output formats are generated at separate times. The method or apparatus of Azima et al., as modified by Tsunekawa, could only result in a method or apparatus that generates all of the data in one of the first and second output formats band by band, then generates the data in

the other of the first and second output formats band by band, which clearly cannot be considered to be simultaneously.

Thus, the combination of Azima et al. and Tsunekawa clearly fails to teach or suggest the features of "sequentially processing each of the plurality of bands, wherein the processing of each of the plurality of bands includes: i) generating first output data having the first output format; and ii) generating, from the first output data, second output data having the second output format, wherein the first output format is different from the second output format," "the first output format is a bitmap arranged to drive a main output device, and the second output format is arranged to drive a proofing device," and "each of the plurality of bands is processed into the first output format and the second output format before a next of the plurality of bands is processed into the first output format and the second output format," as recited in Applicant's claim 19, and similarly in Applicant's claim 27.

Accordingly, Applicant respectfully submits that a rejection of claims 19 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Azima et al. and Tsunekawa would be improper.

In view of the foregoing amendments and remarks, Applicant respectfully submits that claims 19 and 27 are allowable. Claims 20-26 and 28 depend upon claims 19 and 27, and are therefore allowable for at least the reasons that claims 19 and 27 are allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicant petitions the Commissioner for a ONE-month extension of time, extending to July 28, 2008 (July 26, 2008 falls on a Saturday), the period for response to the Office Action dated March 28, 2008.

Application No. 10/505,322
July 28, 2008
Reply to the Office Action dated March 26, 2008
Page 10 of 10

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Dated: July 28, 2008

/Stephen R. Funk #57,751/
Attorneys for Applicant

KEATING & BENNETT, LLP
1800 Alexander Bell Drive, Suite 200
Reston, VA 20191
Telephone: (571) 313-7440
Facsimile: (571) 313-7421

Joseph R. Keating
Registration No. 37,368

Stephen R. Funk
Registration No. 57,751